GÃ¼nter Gauglitz

List of Publications by Year
in descending order

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102	7,111	201674	95266
papers	citations	27 h-index	68 g-index

539	539	539	7656
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface plasmon resonance sensors: review. Sensors and Actuators B: Chemical, 1999, 54, 3-15.	7.8	4,817
2	Direct optical sensors: principles and selected applications. Analytical and Bioanalytical Chemistry, 2005, 381, 141-155.	3.7	220
3	Surface modification for direct immunoprobes. Biosensors and Bioelectronics, 1996, 11, 579-590.	10.1	173
4	A direct optical immunosensor for atrazine detection. Analytica Chimica Acta, 1995, 311, 289-299.	5.4	112
5	Affinity Detection of Low Molecular Weight Analytes. Analytical Chemistry, 1996, 68, 139-143.	6.5	96
6	Direct optical detection in bioanalysis: an update. Analytical and Bioanalytical Chemistry, 2010, 398, 2363-2372.	3.7	91
7	E-Healthâ€"a topic for analytical chemists?. Analytical and Bioanalytical Chemistry, 2016, 408, 1-2.	3.7	89
8	Assessment of affinity constants by rapid solid phase detection of equilibrium binding in a flow system. Journal of Immunological Methods, 1997, 201, 189-206.	1.4	70
9	ABC Spotlight on metal-organic frameworks (MOFs). Analytical and Bioanalytical Chemistry, 2017, 409, 1-2.	3.7	67
10	On-Chip Integrated Mid-Infrared GaAs/AlGaAs Machâ€"Zehnder Interferometer. Analytical Chemistry, 2013, 85, 3050-3052.	6.5	56
11	Point-of-Care Platforms. Annual Review of Analytical Chemistry, 2014, 7, 297-315.	5.4	53
12	Critical assessment of relevant methods in the field of biosensors with direct optical detection based on fibers and waveguides using plasmonic, resonance, and interference effects. Analytical and Bioanalytical Chemistry, 2020, 412, 3317-3349.	3.7	51
13	ABC Spotlight on paper-based strips analytics. Analytical and Bioanalytical Chemistry, 2018, 410, 1-3.	3.7	44
14	Interaction of Chemically Modified Antisense Oligonucleotides with Sense DNA:Â A Label-Free Interaction Study with Reflectometric Interference Spectroscopy. Analytical Chemistry, 1999, 71, 2850-2857.	6.5	42
15	Characterisation of morphology of self-assembled PEG monolayers: a comparison of mixed and pure coatings optimised for biosensor applications. Analytical and Bioanalytical Chemistry, 2008, 391, 1783-1791.	3.7	41
16	Development of an assay for label-free high-throughput screening of thrombin inhibitors by use of reflectometric interference spectroscopy. Analytical and Bioanalytical Chemistry, 2002, 372, 141-147.	3.7	40
17	Label-free characterisation of oligonucleotide hybridisation using reflectometric interference spectroscopy. Analytical and Bioanalytical Chemistry, 2005, 382, 1889-1894.	3.7	40
18	Analytical evaluation of sensor measurements. Analytical and Bioanalytical Chemistry, 2018, 410, 5-13.	3.7	38

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19	Spectral interference refractometry by diode array spectrometry. Analytical Chemistry, 1988, 60, 2609-2612.	6.5	37
20	Label-free characterization of cell adhesion using reflectometric interference spectroscopy (RIfS). Analytical and Bioanalytical Chemistry, 2005, 384, 407-413.	3.7	37
21	Potential of label-free detection in high-content-screening applications. Journal of Chromatography A, 2007, 1161, 2-8.	3.7	35
22	Specific binding of low molecular weight ligands with direct optical detection. Biosensors and Bioelectronics, 1997, 12, 531-538.	10.1	33
23	Investigation of initial pellicle formation on modified titanium dioxide (TiO2) surfaces by reflectometric interference spectroscopy (RIfS) in a model system. Dental Materials, 2004, 20, 814-822.	3.5	30
24	Development of a new parallelized, optical biosensor platform for label-free detection of autoimmunity-related antibodies. Analytical and Bioanalytical Chemistry, 2014, 406, 3305-3314.	3.7	30
25	Label-free optical biosensor for detection and quantification of the non-steroidal anti-inflammatory drug diclofenac in milk without any sample pretreatment. Analytical and Bioanalytical Chemistry, 2014, 406, 3377-3386.	3.7	30
26	Development of a paper-based lateral flow immunoassay for simultaneous detection of lipopolysaccharides of Salmonella serovars. Analytical and Bioanalytical Chemistry, 2018, 410, 863-868.	3.7	30
27	Strategies for Label-Free Optical Detection. , 2008, 109, 395-432.		28
28	Reflectometric interference spectroscopy (RIfS) as a new tool to measure in the complex matrix milk at low analyte concentration. Analytical and Bioanalytical Chemistry, 2012, 402, 529-536.	3.7	27
29	Nano-MIP based sensor for penicillin G: Sensitive layer and analytical validation. Sensors and Actuators B: Chemical, 2018, 267, 26-33.	7.8	27
30	Optical sensors with molecularly imprinted nanospheres: a promising approach for robust and label-free detection of small molecules. Analytical and Bioanalytical Chemistry, 2012, 402, 3245-3252.	3.7	26
31	In-situ characterization of thin polymer films for applications in chemical sensing of volatile organic compounds by spectroscopic ellipsometry. Fresenius' Journal of Analytical Chemistry, 1997, 357, 292-296.	1.5	25
32	Label free binding assay with spectroscopic detection for pharmaceutical screening. Fresenius' Journal of Analytical Chemistry, 1997, 359, 15-22.	1.5	24
33	Determination of affinity constants of locked nucleic acid (LNA) and DNA duplex formation using label free sensor technology. Analyst, The, 2005, 130, 1634.	3.5	24
34	Glyphosate analysis using sensors and electromigration separation techniques as alternatives to gas or liquid chromatography. Analytical and Bioanalytical Chemistry, 2018, 410, 725-746.	3.7	24
35	CCD camera image analysis for mapping solute concentrations in saturated porous media. Analytical and Bioanalytical Chemistry, 2009, 395, 1867-1876.	3.7	21
36	A robust sensor platform for label-free detection of anti-Salmonella antibodies using undiluted animal sera. Analytical and Bioanalytical Chemistry, 2013, 405, 6461-6469.	3.7	21

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37	IR absorption and reflectometric interference spectroscopy (RIfS) combined to a new sensing approach for gas analytes absorbed into thin polymer films. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 72, 994-999.	3.9	20
38	Genetic algorithms and neural networks for the quantitative analysis of ternary mixtures using surface plasmon resonance. Chemometrics and Intelligent Laboratory Systems, 2003, 65, 67-81.	3.5	19
39	Different approaches to multivariate calibration of nonlinear sensor data. Analytical and Bioanalytical Chemistry, 2004, 380, 383-396.	3.7	19
40	Reflectometric interference spectroscopy combined with MALDIâˆ'TOF mass spectrometry to determine quantitative and qualitative binding of mixtures of vancomycin derivatives. Analytical and Bioanalytical Chemistry, 2005, 382, 1942-1948.	3.7	19
41	Terminology of bioanalytical methods (IUPAC Recommendations 2018). Pure and Applied Chemistry, 2018, 90, 1121-1198.	1.9	19
42	PlasmonicÂverticalÂdimer arrays as elements for biosensing. Analytical and Bioanalytical Chemistry, 2015, 407, 8225-8231.	3.7	18
43	Ultrasensitive Label-Free Immunoassay for Optical Determination of Amitriptyline and Related Tricyclic Antidepressants in Human Serum. Analytical Chemistry, 2015, 87, 8845-8850.	6.5	17
44	A multi-analyte biosensor for the simultaneous label-free detection of pathogens and biomarkers in point-of-need animal testing. Analytical and Bioanalytical Chemistry, 2015, 407, 4005-4013.	3.7	16
45	Optical reflectometric gas sensing: classification of hydrocarbon vapours by pattern recognition applied to RIfS sensor signals. Chemometrics and Intelligent Laboratory Systems, 1995, 30, 211-221.	3.5	15
46	Laser-induced fluorescence detection platform for point-of-care testing. Measurement Science and Technology, 2017, 28, 085701.	2.6	15
47	Lab 4.0: SiLA or OPC UA. Analytical and Bioanalytical Chemistry, 2018, 410, 5093-5094.	3.7	14
48	Label-free quantification of cystatin C as an improved marker for renal failure. Analytical and Bioanalytical Chemistry, 2012, 402, 349-356.	3.7	12
49	Artificial vs. human intelligence in analytics. Analytical and Bioanalytical Chemistry, 2019, 411, 5631-5632.	3.7	12
50	Blister-Actuated LIFT Printing for Multiparametric Functionalization of Paper-Like Biosensors. Micromachines, 2019, 10, 221.	2.9	12
51	Nuclear receptors in analytics â€“ a fruitful joint venture or a wasteful futility?. TrAC - Trends in Analytical Chemistry, 2010, 29, 297-305.	11.4	10
52	Reflectometric Interference Spectroscopy. Methods in Molecular Biology, 2017, 1571, 207-220.	0.9	9
53	Fibronectin adsorption on oxygen plasma-treated polyurethane surfaces modulates endothelial cell response. Journal of Materials Chemistry B, 2021, 9, 1647-1660.	5.8	9
54	Through the looking-glass - Recent developments in reflectometry open new possibilities for biosensor applications. TrAC - Trends in Analytical Chemistry, 2022, 156, 116708.	11.4	9

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55	Biomolecular interaction analysis under electrophoretic flow conditions. Analytical and Bioanalytical Chemistry, 2006, 384, 1129-1133.	3.7	8
56	Surface-enhanced infrared absorption studies towards a new optical biosensor. Beilstein Journal of Nanotechnology, 2016, 7, 1736-1742.	2.8	7
57	An integrated device for fast and sensitive immunosuppressant detection. Analytical and Bioanalytical Chemistry, 2022, 414, 3243-3255.	3.7	6
58	ABC Spotlight on single-molecule detection. Analytical and Bioanalytical Chemistry, 2020, 412, 7043-7045.	3.7	5
59	Comparison of methods for quantitative biomolecular interaction analysis. Analytical and Bioanalytical Chemistry, 2022, 414, 661-673.	3.7	5
60	Mustererkennung und Multikomponentenanalyse bei chemischen Sensoren. TM Technisches Messen, 1995, 62, 229-236.	0.7	4
61	Atomic Absorption Spectrometry (AAS) and Atomic Emission Spectrometry (AES). , 2005, , 421-496.		4
62	X-Ray Fluorescence Analysis. , 2005, , 363-420.		4
63	ABC Spotlight on effect-directed analysisâ€"dose instead of concentration. Analytical and Bioanalytical Chemistry, 2015, 407, 3261-3263.	3.7	4
64	Direct optical detection. Analytical and Bioanalytical Chemistry, 2015, 407, 3881-3882.	3.7	4
65	Basics of Optical Spectroscopy. , 2005, , 37-47.		3
66	Solution NMR Spectroscopy. , 2005, , 209-268.		2
67	Solid-State NMR. , 2005, , 269-326.		2
68	Meet the Editors of an Outstanding Journal â€" An interview. Analytical and Bioanalytical Chemistry, 2012, 402, 7-13.	3.7	2
69	ABC SpotlightÂon carbon nanotubes (CNTs). Analytical and Bioanalytical Chemistry, 2014, 406, 6077-6079.	3.7	2
70	Preparation of Liquid and Solid Samples. , 2014, , 1-14.		2
71	Recent trends in (bio)analytical chemistry. Analytical and Bioanalytical Chemistry, 2021, 413, 5533-5534.	3.7	2
72	Surface Analysis Techniques. , 2005, , 497-599.		1

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73	LC-MS in Environmental Analysis. , 2005, , 152-243.		1
74	NMR. , 2005, , 297-315.		1
75	An Introduction to Solution, Solid-State, and Imaging NMR Spectroscopy. , 2005, , 177-208.		1
76	Sample Collection and Preparation of Liquid and Solids. , 2005, , 17-35.		1
77	Gas Chromatography/Ion Trap Mass Spectrometry (GC/ITMS) for Environmental Analysis. , 2005, , 244-267.		1
78	ABCâ€™s spotlight on the nanoworld. Analytical and Bioanalytical Chemistry, 2016, 408, 6235-6237.	3.7	1
79	Advances in direct optical detection. Analytical and Bioanalytical Chemistry, 2020, 412, 3263-3264.	3.7	1
80	ABC presents recent trends in (bio)analytical chemistry. Analytical and Bioanalytical Chemistry, 2020, 412, 1955-1956.	3.7	1
81	Advancements in sensor technology with innovative and significant research publications: how to write that perfect paper?. Analytical and Bioanalytical Chemistry, 2022, 414, 21-24.	3.7	1
82	Parallelized label-free monitoring of cell adhesion on extracellular matrix proteins measured by single colour reflectometry. Analytical and Bioanalytical Chemistry, 2021, , 1.	3.7	1
83	The new generation: quantum sensors. Analytical and Bioanalytical Chemistry, 2021, 413, 5679-5680.	3.7	1
84	Focus on bioanalysis. Analytical and Bioanalytical Chemistry, 2003, 377, 383-385.	3.7	0
85	Measurement Techniques. , 2005, , 70-88.		0
86	Collection and Preparation of Gaseous Samples. , 2005, , 4-16.		0
87	Bioanalysis. , 2005, , 1-147.		0
88	Optical Spectroscopy. , 2005, , 279-296.		0
89	Process Mass Spectrometry. , 2005, , 316-335.		0
90	Elemental Analysis. , 2005, , 336-376.		0

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91	Hyphenated Techniques for Chromatographic Detection. , 2005, , 381-435.		0
92	Optical Spectroscopy. , 2005, , 441-468.		0
93	To the memory of Wilhelm Fresenius. Analytical and Bioanalytical Chemistry, 2005, 382, 1727-1729.	3.7	0
94	Microarray Biochips - Thousands of Reactions on a Small Chip (MOBA). , 2006, , 405-476.		0
95	Section III: Methods 2: NMR. , 2014, , 183-192.		0
96	Section VI: Methods 5: Surface Analysis. , 2014, , 699-708.		0
97	Catching the eye with an abstract. Analytical and Bioanalytical Chemistry, 2015, 407, 637-638.	3.7	0
98	Social impact of analytical chemistry. Analytical and Bioanalytical Chemistry, 2017, 409, 5613-5614.	3.7	0
99	ABC presents bioanalysis and environmental analysis. Analytical and Bioanalytical Chemistry, 2018, 410, 2273-2274.	3.7	0
100	European analytical column number 47. Analytical and Bioanalytical Chemistry, 2019, 411, 3695-3698.	3.7	0
101	Analytical and Bioanalytical Chemistry (ABC): tradition and vision. Analytical and Bioanalytical Chemistry, 2020, 412, 3951-3953.	3.7	0
102	Smartphone biosensor for Salmonella and Amitriptyline. , 2019, , .		0